

Work Order ID 53886

November 23, 2009 11:23:10 AM

Page 1

Item ID: D3140-89

Accept



Setup Start



Revision ID: F

Stop



Item Name: Doubler

Start Date: 23/11/2009 Start Qty: 10.00



Cust Item ID:

Required Date: 27/11/2009 Req'd Qty: 10.00



Customer:

Reference:

Run Start



Approvals:

Process Plan: RL

Date: 09-11-23

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3140

Rev F

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3140

Dwg Rev: F

Prog Rev: F

2-Deburr if necessary

RB 9-12-7

(15)

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

RB 9-12-7

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

278 on 12/08

(15)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ #PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 53886

November 23, 2009 11:23:10 AM



Page 2

Item ID: D3140-89

Accept



Setup Start



Revision ID: F

Stop



Item Name: Doubler

Start Date: 23/11/2009 Start Qty: 10.00



Cust Item ID:

Required Date: 27/11/2009 Req'd Qty: 10.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

130



Small Fab

Small Fab

0.00

Memo

0.00

Small Fab

1-Scuff surfaces with 80grit sandpaper per QSI 006
2-Deburr.
No sharp edges

09/12/14 (15)

140



QC

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Quality Control

2) 09/12/14

(15)

150



HandFinish

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

Hand Finishing

09/12/17

15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 53886

November 23, 2009 11:23:10 AM



Page 3

Item ID: D3140-89

Accept



Setup Start



Revision ID: F

Stop



Item Name: Doubler

Start Date: 23/11/2009 Start Qty: 10.00



Cust Item ID:

Required Date: 27/11/2009 Req'd Qty: 10.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

160

QC3- Inspect Part Finish

0.00



BR 09-12-17 (15)

QC

Memo

0.00

Quality Control

170

Identify as per dwg & Stock Location: 151

0.00



9/12/17 (15) SF

Packaging

Memo

0.00

Packaging

180

QC21- Final Inspection - Work Order Release

0.00



09/12/17 JF
MF 09-12-17

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November 23, 2009 11:23:17 AM

Page 1

Work Order ID: 53886



Parent Item: D3140-89RevF



Parent Item Name: Doubler

Start Date: 23/11/2009

Required Date: 27/11/2009

Comments:

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

M2024T3S.032

Purchased

No

100

sf

277.0254

17.4737

27.



189-12-7

2024-T3 .032 sheet

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

277.0254316

102942

1.5

105555

4.0684

106272

5.3

108595

1.2

109240

6.6032

110305

129.99

110778

18.0296316

111699

11.3342

113189

96

18147

3

~~18147~~

15

113189

~~18147~~

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN #	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED JH	APPROVED #	DRAWING NO. D3140	REV. F SHEET 1 OF 7
DATE 06.10.06		TITLE DOOR	SCALE NTS
A	02.04.18	NEW ISSUE	
B	03.01.23	REMOVE -65/-81/-83; ADD -301/-303	
C	04.11.08	CHANGE DELASTEK SPEC. TEC-77; ADD PART MARKING; ADD NOTES 11, 12, 13; CHANGE ANGLE -95/-97/-98 TO 106°	
D	05.11.23	ADD -103/-104/-105/-106; REMOVE -67	
E	06.06.09	1.75 WAS 1.88, 4.75 WAS 4.13 ON -08/-07, 1.00 WAS 1.20 ON -09/-10	
F	06.10.06	ADD NOTE 14; CORRECT PART TITLE, NOW D3140-09/-92/-104 SHOWN D3140-10/-91/-103 OPPOSITE	

RELEASED

06.11.13

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 53586

PT 09-11-23

QTY -05	QTY -06	QTY -07	QTY -08	QTY -09	QTY -10	PART NUMBER	DESCRIPTION
X						D3140-05	DOOR
	X					D3140-06	DOOR
		X				D3140-07	DOOR
			X			D3140-08	DOOR
		1		X		D3140-09	DOUBLER ASSEMBLY
			1		X	D3140-10	DOUBLER ASSEMBLY
3	3					D3140-57	PAD
1	1					D3140-59	PAD
2	2					D3140-61	PAD
2	2					D3140-63	PAD
		1	1			D3140-69	PAD
		1	1			D3140-71	PAD
		1	1			D3140-73	PAD
		1	1			D3140-75	PAD
		1	1			D3140-77	PAD
		1	1			D3140-79	PAD
				1	1	D3140-85	ANGLE
1	1					D3140-87	DOUBLER
				1	1	D3140-89	DOUBLER
		1				D3140-91	DOUBLER
			1			D3140-92	DOUBLER
3	3					D3140-95	DOUBLER
1						D3140-97	DOUBLER
	1					D3140-98	DOUBLER
		1	1			D3140-99	DOUBLER
		2	2			D3140-101	DOUBLER
		1				D3140-103	DOUBLER
			1			D3140-104	DOUBLER
		1				D3140-105	DOUBLER
			1			D3140-106	DOUBLER
1	1					D3140-241	DOUBLER
1		1				D3140-301	DOUBLER
	1		1			D3140-303	DOUBLER
				5	5	MS20426AD3-4	RIVET



Copyright © 2002 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN #	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED JH	APPROVED #	DRAWING NO. D3140	REV. F SHEET 2 OF 7
DATE 06.10.06		TITLE DOOR	SCALE NTS

1

COMPOSITE LAYUP & BONDING I.A.W. DELASTEK PROCESS SPEC. TEC-77
MATERIAL STORAGE & HANDLING TO BE I.A.W. DART QSI 006
MAIN LAYUP USES FIBERCOTE E-761/7781 EPOXY FIBERGLASS.
FILL WITH EPOCAST 87269 OR MAGNOBOND 77 A & B AND MA560 FOAM/ NB-51/30 FOAM

2

FINISH: DUPONT HIGHBUILD GREY PRIMER 1144-S

3

MAKE PARTS IN ACCORDANCE WITH THE FOLLOWING TOOLS/MOLDS:

PART	TOOL
D3140-05	B30-23000-01T
D3140-06	B30-23000-02T
D3140-07	B30-23000-03T
D3140-08	B30-23000-04T
D3140-57	B30-23000-57T
D3140-61	B30-23000-61T
D3140-63	B30-23000-63T
D3140-69	B30-23000-69T
D3140-71	B30-23000-71T
D3140-73	B30-23000-73T
D3140-75	B30-23000-75T
D3140-77	B30-23000-77T
D3140-79	B30-23000-79T
D3140-89	D3140-89T1
D3140-301	D3140-301T1
D3140-303	D3140-303T1

W/053886

RELEASED

06.11.13

4

MATERIAL: 2024-T3 (QQ-A-250/4) 0.032 THICK (M2024T3S.032)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

5

MATERIAL: 2024-T3 (QQ-A-250/4) 0.020 THICK (M2024T3S.020)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

6

MATERIAL: 5052-H32/H34 (QQ-A-250/8) 0.040 THICK (M5052H32S.040)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

7

MATERIAL: POLIMEX TR75 1" THICK 4.5 LB KLEGECELL

8

ALL DIMENSIONS IN INCHES

9

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

10

MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (M6061-T6S.063)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

11

DOUBLER TO SIT ON TOP OF FOAM AT THIS LOCATION

12

DOUBLER TO BE RECESSED FLUSH INTO FOAM AT THIS LOCATION

13

RUBBER STAMP WITH DART P/N D3140-05/-06/-07/-08 USING MIL-STD-130

14

PARTS MUST BE SCUFFED WITH 80 GRIT SANDPAPER PRIOR TO ACID ETCH AND
ALODINE PER DART QSI 005 4.1

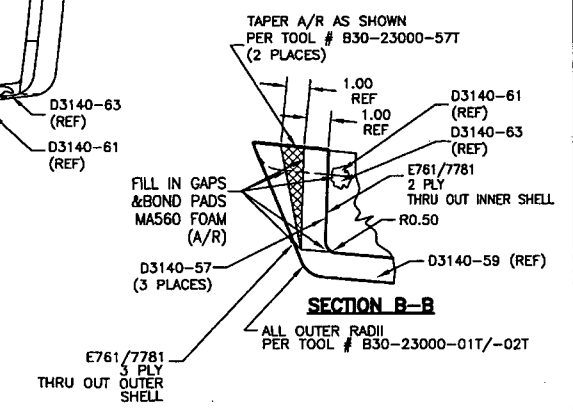


Copyright © 2002 by DART AEROSPACE LTD


THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

[illegible]

SECTION B-B



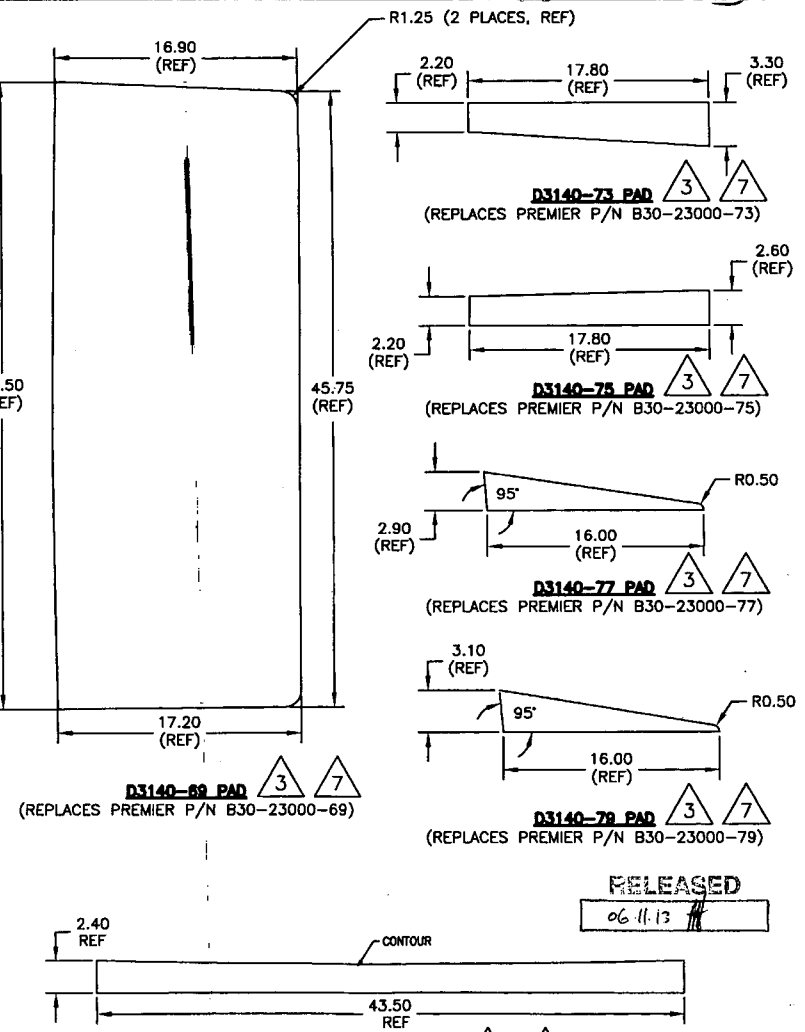
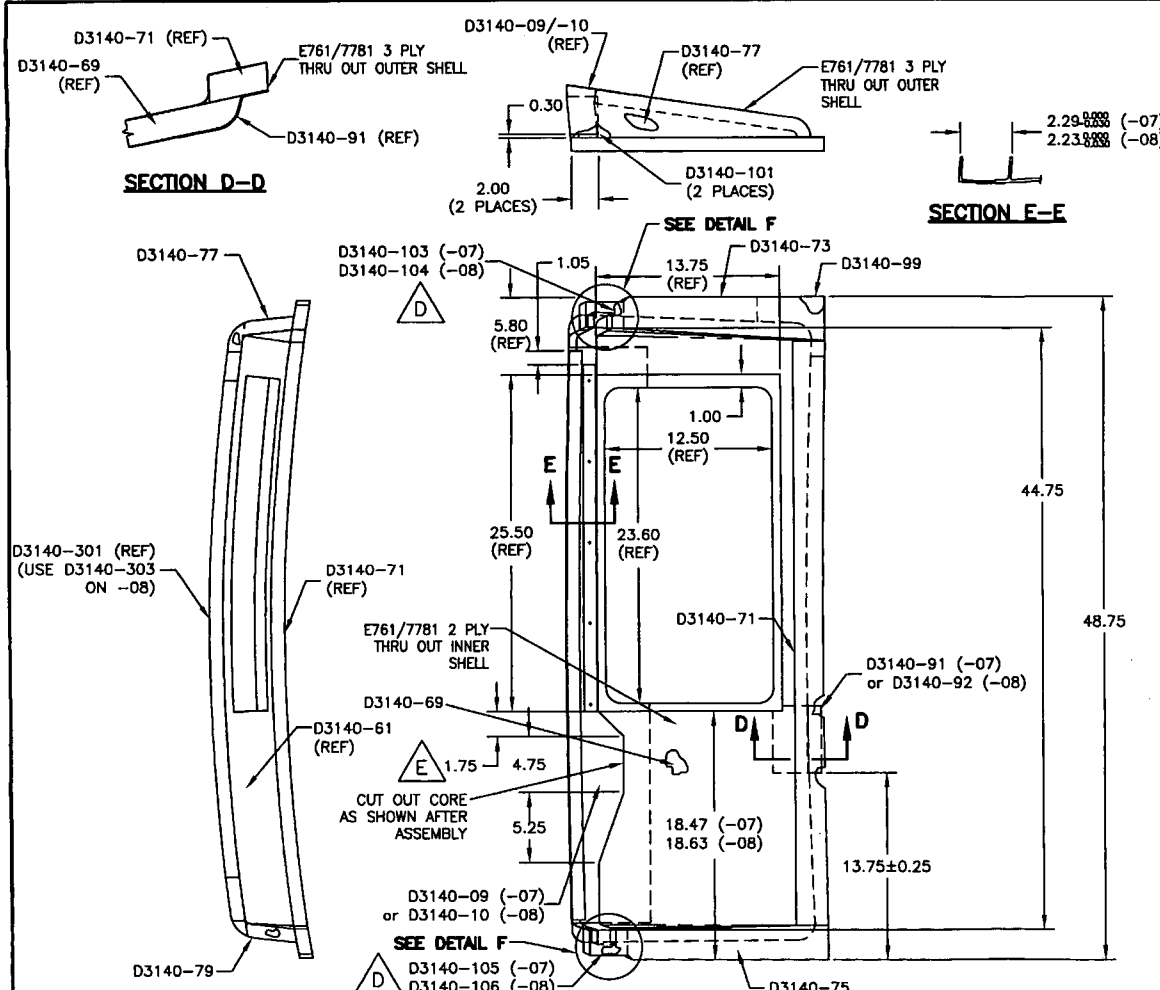
D3140-05 DOOR (SHOWN, REPLACES PREMIER P/N B30-23000-05)
D3140-08 DOOR (OPPOSITE, REPLACES PREMIER P/N B30-23000-06)
(WINDOWS & CUTOUTS TO BE LOCATED PER B30-23000-01T/-02T TOOL)



Three triangles are shown, labeled 1, 2, and 3 from left to right.

COPYRIGHT © 2002 BY DART AEROSPACE LTD.		DESIGN A DRAWN BY CB		DART DART AEROSPACE LTD. HAMILSBURY, ONTARIO, CANADA	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED <i>[Signature]</i> APPROVED <i>[Signature]</i>		DRAWING NO. D3140	
		DATE 06.10.06		TITLE DOOR	
				REV. F SHEET 3 of 7 SCALE NTS	

W/A 53886



D3140-07 DOOR (SHOWN, REPLACES PREMIER P/N B30-23000-07)
D3140-08 (OPPOSITE, REPLACES PREMIER P/N B30-23000-08)
(WINDOW TO BE LOCATED BY TOOL B30-23000-03T/-04T)

1 2 3

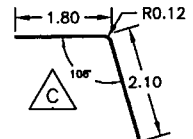
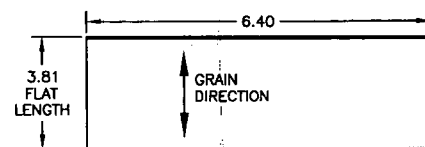
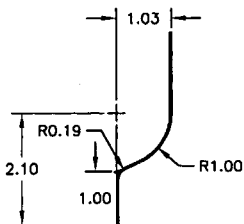
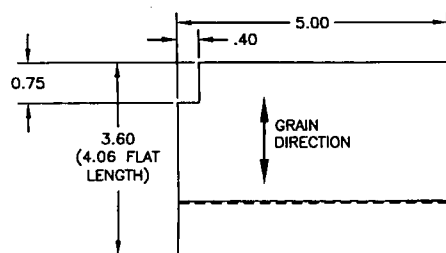
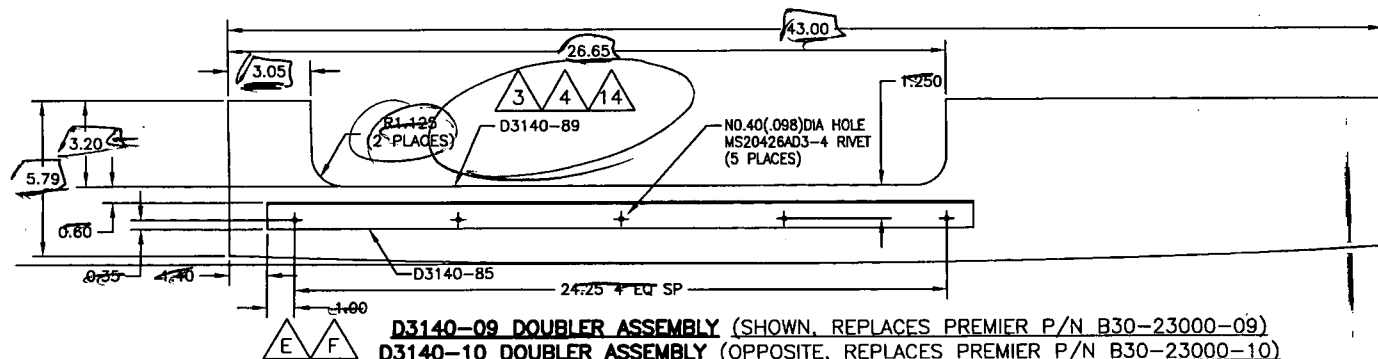
D3140-103 (SHOWN)
D3140-104/-105/-106 (SIMILAR)
DOUBLER EDGE

COPYRIGHT © 2002 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DESIGN	4	DRAWN BY	CB	DART	DART AEROSPACE LTD. HARRISBURT, ONTARIO, CANADA
CHECKED	dh	APPROVED	dh	DRAWING NO.	D3140
DATE	06.10.06	TITLE	DOOR	REV. F	SHEET 4 OF 7
				SCALE	NTS

W/O 53888



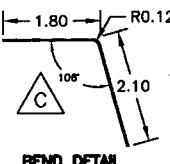
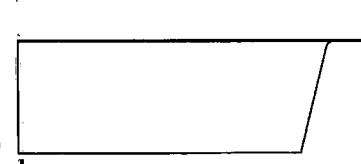
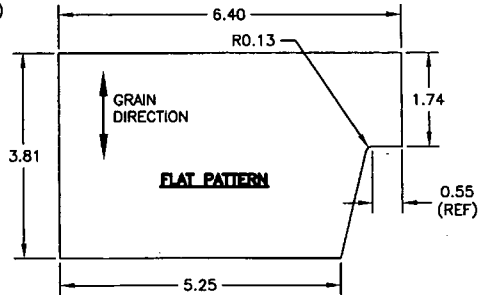
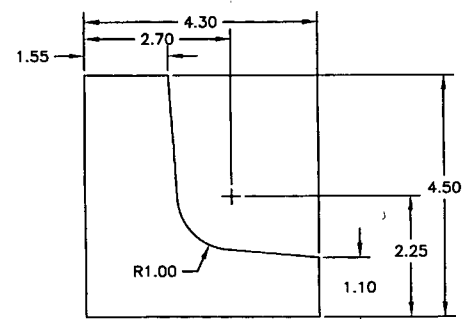
D3140-91F FLAT PATTERN
 (USE TO MAKE D3140-91/-92 DOUBLERS)

D3140-92 DOUBLER (SHOWN, REPLACES PREMIER P/N B30-23000-92)
D3140-91 DOUBLER (OPPOSITE, REPLACES PREMIER P/N B30-23000-91)

D3140-95 DOUBLER (REPLACES PREMIER P/N B30-23000-95)

RELEASED

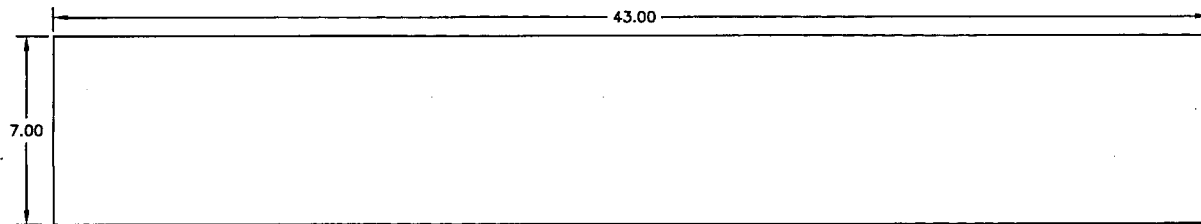
06.11.13



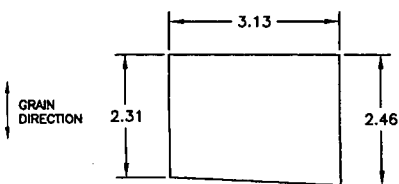
D3140-97 DOUBLER (SHOWN, REPLACES PREMIER P/N B30-23000-97)
D3140-98 DOUBLER (OPPOSITE, REPLACES PREMIER P/N B30-23000-98)

COPYRIGHT © 2002 BY DART AEROSPACE LTD.		DESIGN	DRAWN BY	DART DART AEROSPACE LTD. HARRISBURT, ONTARIO, CANADA	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED	APPROVED	DRAWING NO. D3140	REV. F SHEET 5 OF 7
		DATE 06.10.06		TITLE DOOR	SCALE NTS

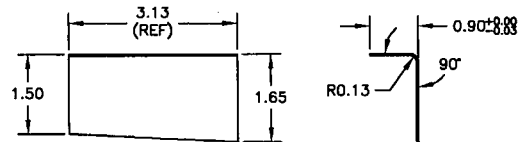
w/o 53886






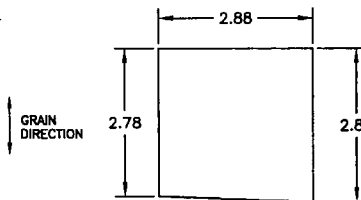
D3140-87 DOUBLER  
(REPLACES PREMIER P/N B30-23000-87)



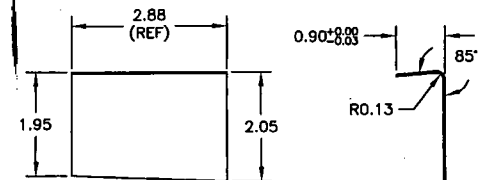
D3140-105F FLAT PATTERN
(USED TO MAKE D3140-105/-106 BRACKETS)







D3140-105 DOUBLER   
(REF)
D3140-106 OPPOSITE

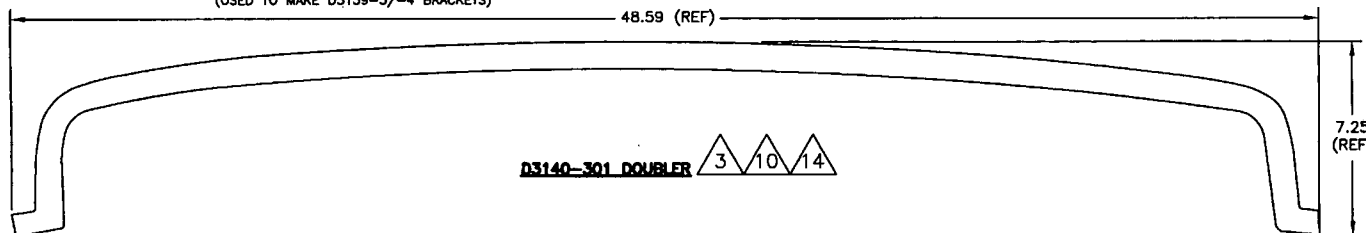


D3140-103F FLAT PATTERN
(USED TO MAKE D3140-103/-104 BRACKETS)

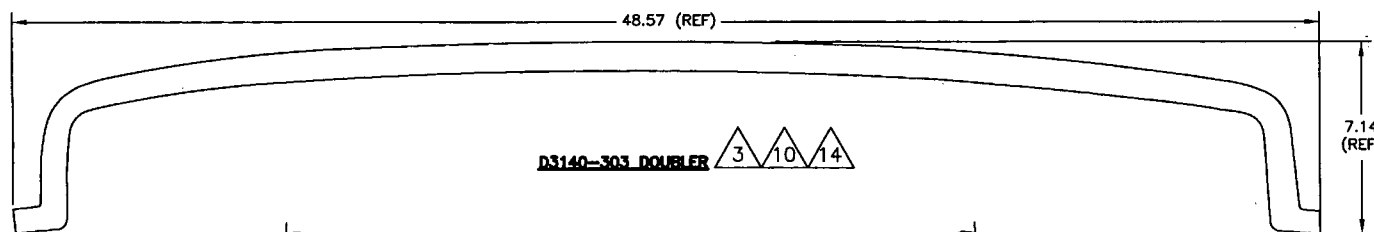


D3140-104 DOUBLER    
D3140-103 OPPOSITE

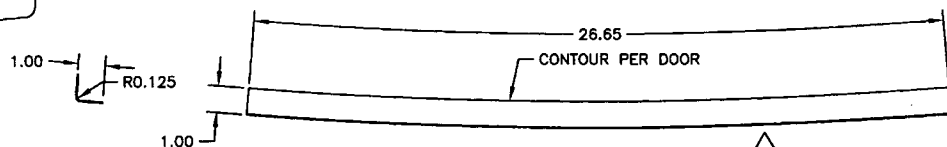
D3159-3F FLAT PATTERN
(USED TO MAKE D3159-3/-4 BRACKETS)




D3140-301 DOUBLER   



D3140-303 DOUBLER   



D3140-85 ANGLE 
FLAT PATTERN: 26.65" x 1.90"
(REPLACES PREMIER P/N B30-23000-85)

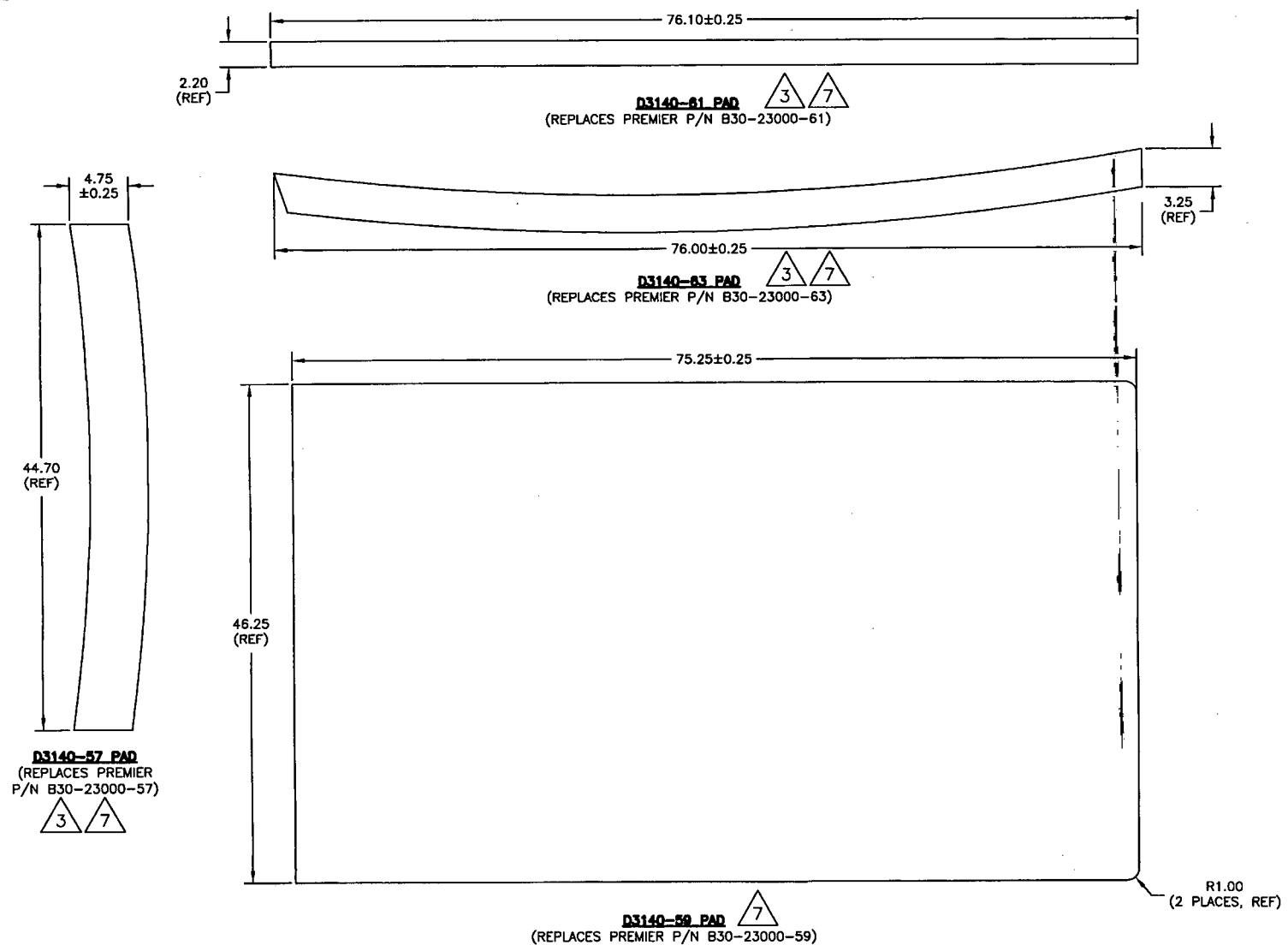
RELEASED
06.11.13

COPYRIGHT © 2002 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DESIGN 4	DRAWN BY CB	DART	DART AEROSPACE LTD. HAMPSHIRE, ONTARIO, CANADA
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3140	REV. F SHEET 6 OF 7
DATE 06.10.06	TITLE DOOR	SCALE MTS	

W/0 53 886



RELEASED
06.11.13

COPYRIGHT © 2002 BY DART AEROSPACE LTD.		DESIGN	4	DRAWN BY	CB	DART AEROSPACE LTD. <small>HAMMERSLEY, ONTARIO, CANADA</small>	REV. F
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED	Jan	APPROVED			
		DATE	06.10.06	TITLE	DOOR	DRAWING NO.	SHEET 7 OF 7
						D3140	SCALE
							NTS